



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-0911; Directorate Identifier 2010-NM-248-AD; Amendment 39-16883; AD 2011-25-07]**

**RIN 2120-AA64**

**Airworthiness Directives; BAE SYSTEMS (Operations) Limited Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all BAE SYSTEMS (Operations) Limited Model 4101 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

A door failure mode has been reported by an operator.

Investigation has shown that the passenger/crew entry door pin-guide plates can fail prior to the expected fatigue life. A metallurgical examination of the failed component (lower guide plate) concluded that the occurred failure was due to exfoliation corrosion.

The current inspection regime is not adequate to identify early stages of this corrosion.

This condition, if not corrected, can lead to the sudden depressurisation of the aeroplane and consequently may injure the occupants.

\* \* \* \* \*

We are issuing this AD to require actions to correct the unsafe condition on these products.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on August 31, 2011 (76 FR 54139). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

A door failure mode has been reported by an operator.

Investigation has shown that the passenger/crew entry door pin-guide plates can fail prior to the expected fatigue life. A metallurgical examination of the failed component (lower guide plate) concluded that the occurred failure was due to exfoliation corrosion.

The current inspection regime is not adequate to identify early stages of this corrosion.

This condition, if not corrected, can lead to the sudden depressurisation of the aeroplane and consequently may injure the occupants.

For the reasons described above, this [EASA] AD requires immediate and periodic ultrasonic inspections [for a split caused by exfoliation corrosion] of the door pin guides and the accomplishment of the relevant corrective actions [replacing the affected guideplates] as necessary.

You may obtain further information by examining the MCAI in the AD docket.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (76 FR 54139, August 31, 2011 ) or on the determination of the cost to the public.

### **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

### **Differences Between This AD and the MCAI or Service Information**

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable.

In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a NOTE within the AD.

### **Costs of Compliance**

We estimate that this AD will affect 2 products of U.S. registry. We also estimate that it will take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$340, or \$170 per product.

In addition, we estimate that any necessary follow-on actions would take about 2 work-hours and require parts costing \$525 for a cost of \$695 per product. We have no way of determining the number of products that may need these actions.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (76 FR 54139, August 31, 2011), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office

(telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**2011-25-07 BAE SYSTEMS (Operations) Limited:** Amendment 39-16883. Docket No. FAA-2011-0911; Directorate Identifier 2010-NM-248-AD.

#### **Effective Date**

(a) This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **Affected ADs**

(b) None.

#### **Applicability**

(c) This AD applies to all BAE SYSTEMS (Operations) Limited Model 4101 airplanes, certificated in any category.

**Subject**

(d) Air Transport Association (ATA) of America Code 52: Doors.

**Reason**

(e) The mandatory continuing airworthiness information (MCAI) states:

A door failure mode has been reported by an operator.

Investigation has shown that the passenger/crew entry door pin-guide plates can fail prior to the expected fatigue life. A metallurgical examination of the failed component (lower guide plate) concluded that the occurred failure was due to exfoliation corrosion.

The current inspection regime is not adequate to identify early stages of this corrosion.

This condition, if not corrected, can lead to the sudden depressurisation of the aeroplane and consequently may injure the occupants.

\* \* \* \* \*

**Compliance**

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**Actions**

(g) Within 6 months after the effective date of this AD, do an ultrasonic inspection of the passenger/crew door upper and lower guide plates for a split caused by exfoliation corrosion, in accordance with the Accomplishment Instructions of BAE SYSTEMS (Operations) Limited Service Bulletin J41-52-064, dated September 15, 2009. Repeat the ultrasonic inspection, thereafter, at intervals not to exceed 48 months.

(h) If a split caused by exfoliation corrosion of an area of 78mm<sup>2</sup> (0.12 in.<sup>2</sup>) or

greater is found during any ultrasonic inspection required by paragraph (g) of this AD: Before further flight, replace any affected guide plates with a serviceable guide plate, in accordance with the Accomplishment Instructions of BAE SYSTEMS (Operations) Limited Service Bulletin J41-52-064, dated September 15, 2009.

#### **FAA AD Differences**

Note 1: This AD differs from the MCAI and/or service information as follows:  
No differences.

#### **Other FAA AD Provisions**

(i) The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Information may be e-mailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective



actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

### **Related Information**

(j) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010-0179, dated August 30, 2010; and BAE SYSTEMS (Operations) Limited Service Bulletin J41-52-064, dated September 15, 2009; for related information.

### **Material Incorporated by Reference**

(k) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on the date specified:

(1) BAE SYSTEMS (Operations) Limited Service Bulletin J41-52-064, dated September 15, 2009, approved for IBR [INSERT DATE 35 DAYS AFTER PUBLICATION].

(2) For BAE SYSTEMS (Operations) Limited service information identified in this AD, contact Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; e-mail [RApublications@baesystems.com](mailto:RApublications@baesystems.com); Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on November 23, 2011.

Ali Bahrami,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2011-31314 Filed 12/12/2011 at 8:45 am; Publication Date: 12/13/2011]